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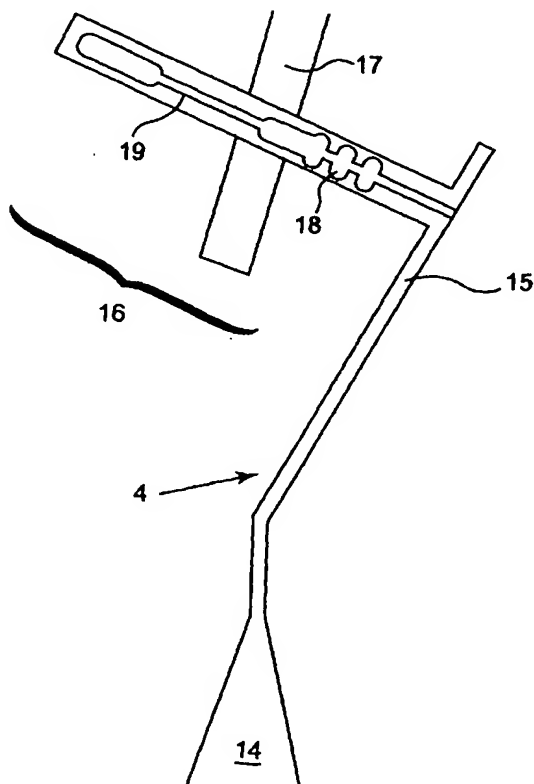
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(54) Title: SUB-MILLIMETRE WAVELENGTH CAMERA



(57) **Abstract:** The invention relates to an imaging device to be used with millimetre and/or sub-millimetre radiation comprising at least a pair of substrates, at least one of which is patterned on at least one surface with a patterning defining at least one radiation detector, each radiation detector comprising : an antenna adapted to receive millimetre and/or sub-millimetre electromagnetic radiation, a mixer channel coupled to said antenna and in communication with a via extending through a substrate for connection to a signal output, a mixer comprising filters being mounted in the mixer channel for extracting an intermediate frequency signal in dependence upon said radiation received by the antenna, a waveguide structure coupled to said mixer and having a signal input for connection to a local oscillator.



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